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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/544,268

07/24/2006

John Gordon

P07285US00

1331

22885 7590 12/19/2007
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801 GRAND AVENUE
SUITE 3200
DES MOINES, IA 50309-2721

EXAMINER

MUROMOTO JR, ROBERT H

ART UNIT

PAPER NUMBER

3765

MAIL DATE

DELIVERY MODE

12/19/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/544,268

Applicant(s)

GORDON ET AL.

Examiner

Robert H. Muromoto, Jr.

Art Unit

3765

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 25-47 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 25-47 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>6/29/07;12/12/05</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

The abstract of the disclosure is objected to because the abstract recites, "The invention relates to...", improper language for US patent practice. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 40 and 45-47 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 40 recites "elasticity" and then next to it recites "(stretch)", this is ambiguous and unclear. Elasticity is a material's ability to be deformed under some force or tension and then go back to its original shape once the force or tension has been removed, while stretch is a broader term related to only the initial deformability of a material. It is not clear which the applicant is claiming.

Claims 45 and 46 recite "the at least one inner portion formed of a knitted or woven material". The recitation has no antecedent basis.

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 25-36, 38, and 40-46 are rejected under 35 U.S.C. 102(b) as being anticipated by US patent 4,274,158.

'158 discloses an insulating material for use in diver's suits (wet or dry).

'158 discloses a material with many lamina that are then laminated to each other as claimed.

The layer 26 closest to the wearer's skin is disclosed as being made from knitted nylon (synthetic), cotton, wool or blends or sublayers thereof, as claimed.

'158 discloses, 'This layer 26 serves primarily to absorb perspiration from the diver's body in the case of a so-called "dry suit" where wrists, ankles and neck openings seal with the skin of the diver or in the case of a two-piece "dry suit". It also permits easy donning and doffing of the garment. In the case of a "wet suit" this layer 26 would function to minimize the extent of convective heat loss to water moving around between the diver's skin and his diving suit (col. 5, lines 44-54).'

Suit in figures covers areas in claims 28 and 41.

The layer 26 covers the entire suit inherently providing the limitations in claims 30-33 and 41.

Layer 20 is neoprene and is the first outer layer as claimed.

Additional layers are provided outside of the outer layer as claimed.

The layer 26 is clearly separate from outer layer 20 that is then attached together (laminated together). The 'worn as...' limitation does not limit the suit. And the suit is worn as 'a separate layer with the outer layer placed thereover with attachment means provided.' This limitation is also a product-by-process limitation. Once the examiner shows that the reference product is similar to the claimed product the burden shifts to the applicant to show a material difference between the prior art and claimed invention.

As shown in figures once layer 26 attached or laminated to the other layers it does form an 'integral' material as claimed.

'158 discloses that the layer 26 is a knitted two way stretch fabric made from nylon (inherently elastic to some extent) or blends including among other materials wool and nylon. The knitted structure and the use of nylon in the blend would at least partially impart some measure of "elasticity" to the wool blend.

With respect to claim 43, the suit is disclosed as being functional as a wetsuit and inherently provides means for the suit to permit flow of water as claimed. Additionally, the elastic nature of the reference material would inherently provide wrist and ankle seams that would function as recited control means. The specification recites these control means as smooth skin seals at the ankles and wrists.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 37, 39, and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over '158.

Although essentially all of the limitations of the claimed invention are disclosed above, '158 does not teach the use of merino wool or the specific percentage for blending of the synthetic and wool material.

With respect to the percentage blend, absent any criticality or showing of unexpected results arising from the specific blend range, one of ordinary skill in the art could through routine engineering design choice determine the exact blend percentage for a desired end use application of the dive suit material.

As for the use of merino wool, it is a well-known and widely used practice to use merino wool instead of standard wool. Merino wool is recognized as a higher grade of wool, having increased softness and comfort against the skin (see Non Patent Literature cited on PTO-892) and has been in use for hundreds of years in all type of garments that require warmth and comfort.

Therefore it would have been an obvious variant to modify the '158 wool or wool blended layer to use merino wool as merino wool is recognized as a higher grade of wool, having increased softness and comfort against the skin (see Non Patent Literature cited on PTO-892) and has been in use for hundreds of years in all type of garments that require warmth and comfort.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert H. Muromoto, Jr. whose telephone number is 571-272-4991. The examiner can normally be reached on 8-530, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Welch can be reached on 571-272-4996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Bobby Muromoto
/Bobby Muromoto/
Patent examiner
Art unit 3765
December 13, 2007